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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,105	03/02/2004	Osamu Maeda	FY.F5651US1DV	2437
20995 7590: 08/29/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER MONIKANG, GEORGE C	
			ART UNIT 2615	PAPER NUMBER
			NOTIFICATION DATE 08/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/791,105

Applicant(s)

MAEDA, OSAMU

Examiner

George C. Monikang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/21/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 & 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al, US Patent 5,635,903, in view of Miller, US Patent 5,237,617.

Re Claim 1, Koike et al discloses a sound control signal (fig. 3: 32) to control a sound synthesizer to cause the sound synthesizer (fig. 3: 33) to generate sound that simulates the sound of an internal combustion engine (abstract) having a plurality of cylinders (fig. 1: 2A-2D), the cylinders having a firing interval (col. 1, lines 44-50), the sound control signal comprising: a repetition rate that matches the firing interval (col. 1, lines 44-50); a first sound signal applied to the sound synthesizer (fig. 1: 11a), the first sound signal having at least one of: a first pitch that can be varied for each firing interval (fig. 2a: 21; col. 6, lines 29-37), and a first volume that can be varied for each firing

interval (col. 7, lines 20-25); and a second sound signal applied to the sound synthesizer concurrently with the first sound signal (fig. 1: 12a), the second sound signal having at least one of: a second pitch that can be varied for each firing interval independently of the first pitch of the first sound signal (fig. 2a: 22; col. 6, lines 29-37), but fails to disclose a second volume that can be varied for each firing interval independently of the first volume of the first sound signal. However, Miller does (col. 4, lines 58-68: multiple volume controls control the different amplifiers independently).

Taking the combined teachings of Koike et al and Miller as a whole, one skilled in the art would have found it obvious to modify the sound control signal (fig. 3: 32) to control a sound synthesizer to cause the sound synthesizer (fig. 3: 33) to generate sound that simulates the sound of an internal combustion engine (abstract) having a plurality of cylinders (fig. 1: 2A-2D), the cylinders having a firing interval (col. 1, lines 44-50), the sound control signal comprising: a repetition rate that matches the firing interval (col. 1, lines 44-50); a first sound signal applied to the sound synthesizer (fig. 1: 11a), the first sound signal having at least one of: a first pitch that can be varied for each firing interval (fig. 2a: 21; col. 6, lines 29-37), and a first volume that can be varied for each firing interval (col. 7, lines 20-25); and a second sound signal applied to the sound synthesizer concurrently with the first sound signal (fig. 1: 12a), the second sound signal having at least one of: a second pitch that can be varied for each firing interval independently of the first pitch of the first sound signal (fig. 2a: 22; col. 6, lines 29-37) of Koike et al with a second volume that can be varied for each firing interval independently of the first volume of the first sound signal as taught in Miller (col. 4, lines

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58-68: multiple volume controls control the different amplifiers independently) in order to be able to distinguish engine noises originating from different locations of the vehicle.

Re Claim 2, the combined teachings of Koike et al and Miller disclose the sound control signal as defined in claim 1, wherein the first pitch of the first sound signal is varied at a first rate (Koike et al, fig. 2a: 21; col. 6, lines 29-37) and the second pitch of the second sound signal is varied at a second rate different from the first rate (Koike et al, fig. 2a: 21; col. 6, lines 29-37) and the first volume of the first sound signal is varied at a first rate (col. 4, lines 58-68: multiple volume controls control the different amplifiers independently) and the second volume of the second sound signal is varied at a second rate different from the first rate (col. 4, lines 58-68: multiple volume controls control the different amplifiers independently) to cause the synthesizer to generate sound having fluctuations in volume, pitch and tone.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Monikang whose telephone number is 571-270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George Monikang

8/14/2007


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